CLAIMS

1. Process for preparing a modified diisocyanate to which is attached a pendant aliphatic chain containing at least 15 carbon atoms, said modified diisocyanate being obtained by reacting an isocyanate functional group of a triisocyanate with a terminal functional group of an aliphatic chain.

2. Process for preparing a modified diisocyanate according to Claim 1, characterized in that said preparation of the modified diisocyanate is carried out in a solvent medium with stirring and heating.

3. Process for preparing a modified diisocyanate according to one of Claims 1 and 2, characterized in that said terminal functional group is selected from alcohols, anhydrides, carboxylic acids and amines.

4. Process for preparing a self-lubricating insulating varnish comprising a modified polymer comprising a base polymer to which is attached a pendant aliphatic chain containing at least 15 carbon atoms, said process being characterized in that it comprises the following steps:

- preparing a modified diisocyanate according to one of Claims 1 to 3,
- mixing said modified diisocyanate with at least one difunctionalized monomer containing two second functional groups which are reactive with the first isocyanate functional groups of the modified diisocyanate, to carry out said synthesis of said modified polymer.

5. Process for preparing a self-lubricating insulating varnish according to Claim 4, characterized in that said base polymer is a polyamide-imide.

6. Process for preparing a self-lubricating insulating varnish according to Claim 4, characterized in that said base polymer is selected from polyurethanes,

polyamides, polyesters, polyester-imides, solderable polyester-imides, polyester amide-imides, polyimides, polyepoxide compounds and polyphenoxide compounds.

7. Process for preparing a self-lubricating insulating varnish according to Claim 4, characterized in that said base polymer is a semiaromatic polyamide and in that the so-called anchor group attaching the base polymer to said pendant aliphatic chain is a urethane or an amide, such that said self-lubricating insulating varnish is thermally adhering.

8. Process for preparing a self-lubricating insulating varnish according to Claim 4, characterized in that, said base polymer being a polyurethane, the process further comprises a step of mixing the modified polyurethane with a polymer selected from a solderable polyester-imide and a modified solderable polyester-imide.

9. Process for preparing a self-lubricating insulating varnish according to one of Claims 4 to 8, characterized in that a difunctionalized monomer containing two functional groups similar to the isocyanate functional groups of the modified diisocyanate is mixed with said modified diisocyanate.

10. Process for producing an enameled electrical conductor (1), characterized in that said process comprises the following steps:

- a step of preparing the self-lubricating insulating varnish (4) according to one of Claims 4 to 9,
- a step of coating an electrical conductor with a layer of the self-lubricating insulating varnish.